

ZytoLight® SPEC SMARCB1/22q12 Dual Color Probe



Background

The ZytoLight® SPEC SMARCB1/22q12 Dual Color Probe (PL137) is intended to be used for the qualitative detection of deletions involving the human SMARCB1 gene as well as the detection of chromosome 22q12 specific sequences in formalin-fixed, paraffin-embedded specimens by fluorescence *in situ* hybridization (FISH). The probe is intended to be used in combination with the ZytoLight® FISH-Tissue Implementation Kit (Prod. No. Z-2028-5/-20).

The product is intended for professional use only. All tests using the product should be performed in a certified, licensed anatomic pathology laboratory under the supervision of a pathologist/human geneticist by qualified personnel. The probe is intended to be used as an aid to the differential diagnosis of various cancers and therapeutic measures should not be initiated based on the test result alone.

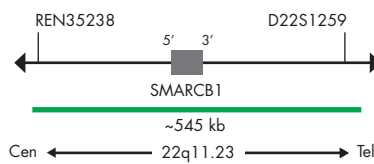
Probe Description

The ZytoLight® SPEC SMARCB1/22q12 Dual Color Probe is composed of:

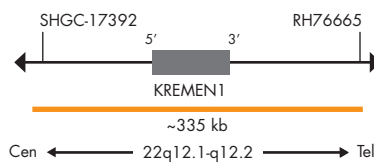
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 22q11.23** (chr22:23,887,951-24,431,064) harboring the SMARCB1 gene region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 22q12.1-22q12.2** (chr22:29,340,078-29,673,440).
- Formamide based hybridization buffer



Ideogram of chromosome 22 indicating the hybridization locations.



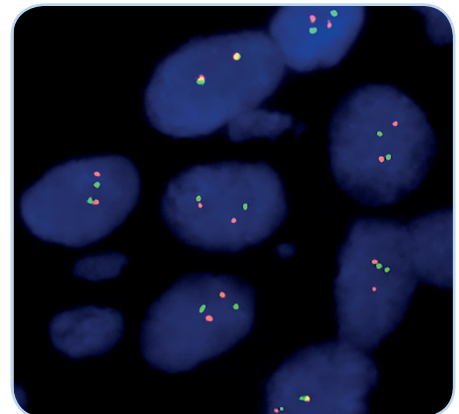
SPEC SMARCB1 Probe map (not to scale).



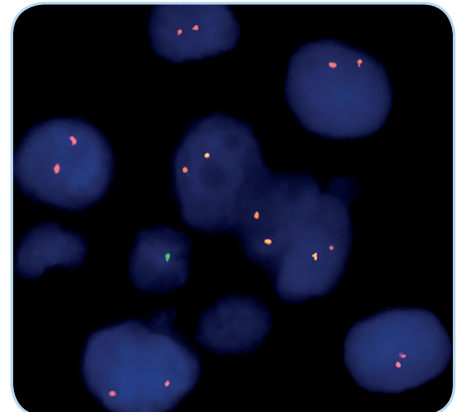
SPEC 22q12 Probe map (not to scale).

Results

In a normal interphase nucleus, two orange and two green signals are expected. In a cell with deletion of the SMARCB1 gene locus, a reduced number of green signals will be observed. Deletions affecting only parts of the SMARCB1 gene might result in a normal signal pattern with green signals of reduced size.



SPEC SMARCB1/22q12 Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals per nucleus.



Example of an aberrant signal pattern: SPEC SMARCB1/22q12 Dual Color Probe hybridized to epithelioid sarcoma tissue section with biallelic deletion of the SMARCB1 gene as indicated by missing green signals in the nuclei.

Prod. No.	Product	Label	Tests* (Volume)
Z-2178-50	ZytoLight SPEC SMARCB1/22q12 Dual Color Probe CE IVD	●/●	5 (50 μl)
Related Products			
Z-2028-5	ZytoLight FISH-Tissue Implementation Kit CE IVD		5
Incl. Heat Pretreatment Solution Citric, 150 ml; Pepsin Solution, 1 ml; Wash Buffer SSC, 210 ml; 25x Wash Buffer A, 50 ml; DAPI/DuraTect-Solution, 0.2 ml			

* Using 10 μl probe solution per test. IVD labeled products are only available in certain countries. All other countries research use only! Please contact your local dealer for more information.

**According to Human Genome Assembly GRCh37/hg19